US Department of Transportation Federal Aviation Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020 11/30/2007 | Electronic Tracking Number | For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N1148G	Serial No.: 24-1205	
	Make: Mooney	Model: M20J	Series: 201
2. Owner	Name (As shown on registration certificate): Pinzon, Pablo A. Jimenez, Craig R. Energetic Materials of Oklahoma, L.L.C.	Address (As shown on registration certificate): Address 1601 S.W. 89th St STE D100; City Oklahoma City; State OK; Zip 73158-6378; Country USA	

3. For FAA Use Only

The (data/alteration) identified herein complied with applicable airworthiness requirements and is approved for the above described aircraft subject to conformity inspection by a person authorized in section 43.7 of the FAR.

04/21/2008 Joseph R. Becke Joseph R Becke
Date FAA Inspector SW-OKC-FSDO

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☑	AIRFRAME	———	(As described in item 1 above)	———
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		
Name: David M. Pitts	☑ U.S. Certificated Mechanic	☐ Manufacturer	
Address: 108 Country Club Circle	☐ Foreign Certificated Mechanic	C. Certificate No.	
City: Midwest City State: OK	☐ Certificated Repair Station	A&P [redacted]	
Zip: 73110-3918 Country: USA	☐ Certificated Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual
	David M. Pitts / 04-21-2008 [redacted]

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Persons Approved by Canadian Department of Transport
	☐	FAA Designee	☐	Repair Station	☒	Inspection Authorization		Other (Specify)

Certificate or Designation No.	Signature/Date of Authorized Individual
A&P [redacted]	David M. Pitts / 04-21-2008 [redacted]

FAA Form 337 (10-06)

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

N1148G 8-24-1205 | 04-21-2008

Nationality and Registration Mark | Date

1.0 Removed existing landing light from right hand side of lower engine cowling. Also removed existing landing light wiring from cowling.

2.0 Installed new XeVision High Intensity Discharge (HID) landing light system (Kit number XV-46-SL) in original location using existing light installation hardware. New light is the same weight and size as the original light.

2.1 The installation is in accordance with XeVision Installation and Operation Manual Instructions provided with the kit, and with reference to AC 43.13-1B Chapter 11, Sections 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15 & 17.

2.2 New light wiring provided in the kit is routed and clamped (using three MS 21919 clamps, three MS 24694 flat head 10-32 screws and three MS20365-1032 lock nuts) from the new landing light along right cowl flap, outboard side, and mounted in the aluminum structure around the engine cowl flap. The new Ballast is mounted on the right forward firewall to facilitate disconnecting the landing light electrical plug when the lower cowling is removed. The ballast is installed with three AN-3 bolts and nut plates.

2.3 The existing landing light switch is used, an inline 15 amp fuse is installed near the switch in the existing landing light wire to the XeVision ballast on the firewall. The existing wiring from the switch to the ballast exceeds the requirement of the new light. New light and Ballast do not interfere with aircraft avionics or any other system in the aircraft. Electrical load is less than original landing light. Ballast steady state current draw is less than 4 amps. Maximum current when light is switched on is 10 amps.

2.4 Landing Light functional checks performed.

2.5 Weight and Balance changes are in accordance with AC 43.13-1B change 1, Chapter 10. See Airplane Flight Manual Weight and Balance records dated Apr 21, 2008 for Ballast addition. Airplane Equipment List updated. Also, Airplane Flight Manual Section 7 has Note added to Landing Light information to see Section 9 (Supplemental Data) for additional Landing Light information.

2.6 Electrical Schematic drawing and Instructions for Continued Airworthiness (ICA) are attached.

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[X] Additional Sheets Are Attached

8. Description of Work Accomplished

N1148G
Nationality and Registration Mark Date

Instructions for Continued Airworthiness for Mooney M20J SN: 24-1205 N1148G April 21, 2008

XeVision (HID) landing Light System

1. INTRODUCTION: This installation was accomplished to increase light illumination and to increase the service life of the landing light.

2. DESCRIPION OF ALTERATION: Remove existing landing light and install a XeVision HID landing light.

3. CONTROL, OPERATION INFORMATION: The XeVision landing light is controlled with the existing aircraft landing light switch. There is a 15 amp inline fuse under instrument panal. There are no special procedures.

4. SERVICE INFORMATION: None. The components are not field repairable and must be replaced with new XeVision components.

5. MAINTENANCE INSTRUCTIONS: The XeVision landing light system is to be maintained in accordance with FAR 43.15, and inspected in accordance with FAR 43.15.

6. TROUBLESHOOTING INFORMATION: If landing light circuit fuse blows, ballast replacement is required. If the light does not illuminate, remove the light or ballast, verify function and replace defective part as required. Bench testing must be done in accordance with XeVision Installation and Operation Instructions. **NOTE: These instructions contain warnings for bench testing.**

7. REMOVAL AND REPLACEMENT INFORMATION: The HID lamp is removed and replaced in the same manner as the original lamp in accordance with the Mooney maintenance manual. **NOTE: The lamp's power receptacle must be clocked to the six o'clock position during reinstallation.** The ballast is removed by removing both electical plugs, and removing three AN-3 (#10) bolts.

8. DIAGRAMS: Access to the ballast is obtain by removing the upper engine cowl. Access to the lamp will require removal of the lower engine cowl.

9. SPECIAL INSPECTION REQUIREMENTS: None, N/A.

[X] Additional Sheets Are Attached

8. Description of Work Accomplished

N1148G
Nationality and Registration Mark Date

10. APPLICATION OF PROTECTIVE TREATMENTS: None, N/A.

11. SPECIAL HARDWARE: None, N/A.

12. SPECIAL TOOLS: None, N/A.

13. ADDITIONAL INSTRUCTIONS: None, N/A.

14. RECOMMENDED OVERHAUL PERIODS: None, N/A.

15. AIRWORTHINESS LIMITATIONS: There are no additional airworthiness limitations.

16. ICA REVISIONS: Revisons to these Instructions for Continued Airworthiness (ICA) may be made by submitting a letter to the local FAA office (FSDO) with a copy of the revised FAA form 337.

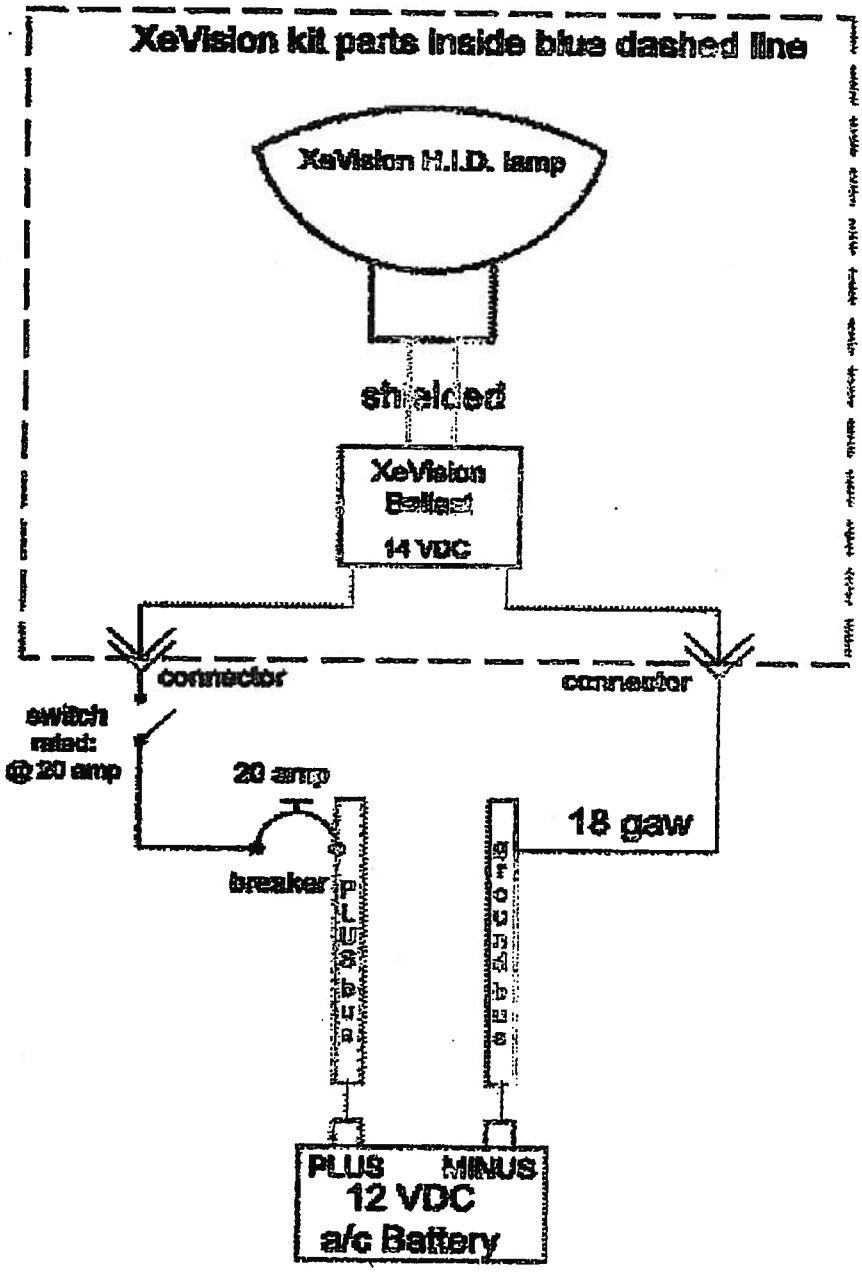
17. IMPLEMENTATION AND RECORDS KEEPING: These instructions for continued airworthiness are to be placed in the the aircraft permanent records and referred to during aircraft inspections and maintenance.

——— END ———

[ ] Additional Sheets Are Attached

HID Xenon Lighting Technology for Aerospace and Industrial applications

Basic Wiring 12 VDC diagram example



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